Asthma, Allergies, & EPiPen Administration

Presented by: Preschool Nurses
March 25th, 2021

Asthma Basics for School

- As per the Asthma and Allergy Foundation of America: "Children spend around seven hours a day in school, not including before and after school activities".
- "Identifying, reducing and eliminating asthma triggers in the school setting is an important part of keeping asthma well-controlled for students, teachers and staff".



New Jersey Laws and Asthma

- N.J.S.A. 18A:40-12.3
 Allows students to self administer an inhaler or Epipen.
 - N.J.S.A. 18A:40-12.7
 - Mandates all schools to have and maintain a nebulizer.
 - 🖬 N.J.S.A. 18A:40:-12.8
 - Asthma Action Plan (AAP) prepared by the student's medical home and submitted to the certified school nurse. The AAP shall identify, at a minimum, asthma triggers, emergency care and shall be included in the individualized health care plan.



What is Asthma?

A Chronic Inflammation- of the lungs airways that causes coughing, chest tightness, wheezing or shortness of breath.



Three things happen to an asthmatic that makes breathing difficult:

- 1. Airways fill with mucus.
- 2. Airway linings swell.
- 3. Muscles around airways tighten also called bronchospasm.

Narrowing of airways makes it difficult for air to move freely in and out of lungs.

Asthma

- Asthma is a leading chronic illness among children and adolescents in the United States.
- It is also one of the leading causes of school absenteeism.
- On average, in a classroom of 30 children, about 3 are likely to have asthma.



Early Warning Signs of an Asthma Attack

- Changes in Breathing:
 - Coughing
 - Wheezing
 - ☐ Breathing through Mouth
 - ☐ Shortness of Breath
- Verbal Complaints:
 - Chest Tightness
 - ☐ Chest Pain
 - Mouth Dry
 - Neck Feels Funny
 - "I just don't feel well."
- Being aware of these early warning signs allows the child to take medication at a time when asthma is easiest to control.



Signs and Symptoms

Children with asthma often experience periods of:

- Shortness of breath
- → Wheezing
- Coughing
- Chest tightness
- Appearing fearful or worried

- Lack of energy
- ☐ Irritable
- Stuffy, runny nose
- Retractions
 - Nasal flaring



These periods are called attacks or episodes and should always be taken seriously!

Asthma Triggers

Allergies:

- Foods
- Pollens
- Animal dander from feathered or furry pets
- Cockroaches
- Dust mites
- Mold

Irritants:

- Air Pollution
- Smoke
- Chemicals and strong smells



Asthma Triggers

Other Triggers:

- Extreme weather changes
- Upper respiratory infections
- Cold air
- Strong emotions
- Exercise

EMERGENCY SIGNS



- ☐ Signs that a CHILD is having A HARD TIME BREATHING are:
 - Retractions
 - Child has trouble walking or talking
 - Struggling for breath



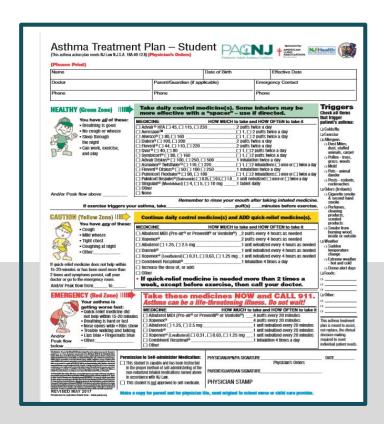
How Does Uncontrolled Asthma Affect Students Learning?

- Fatigue students up at night with symptoms are tired in the morning.
- Absenteeism- related to asthma episodes, health care appointments, and hospitalizations.
- Missed class- time due to frequent school health office visits.



How Is Asthma Controlled?

- Follow the Individualized Asthma Action Plan
- Reduce or eliminate triggers
- Encourage medication compliance
- Monitor response to treatment
- Encourage regular pediatric care
- Ensure good communication among school staff, the pediatrician and parents



Is there a cure?

- No cure, but it can be controlled.
- A child with controlled asthma can live a normal life.
- Asthma can be controlled by:

 Knowing and avoiding common triggers

 Appropriate use of medications



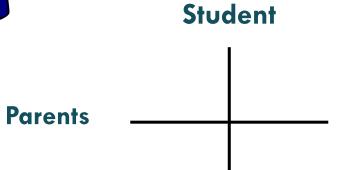








School Asthma Team





Health care provider



School nurse, classroom teacher, paraprofessionals, principal, after-school staff

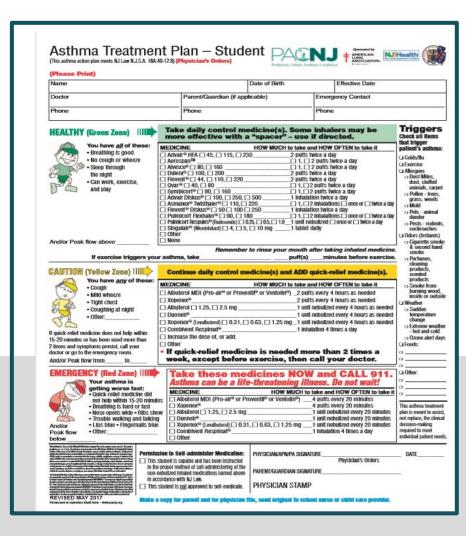
The Teacher's Role in Asthma Management

- Be helpful by reducing exposure to asthma triggers in the classroom.
- Be observant by noticing when students are coughing or showing other signs something is not right.
- Contact the school nurse.
- If the school nurse is not present call a school administrator, call 911 and contact the parent/guardian.
- Remain with the child and provide reassurance/support.



Asthma Treatment Form

- Students who have been diagnosed by their health care providers with asthma, are required to submit to the school nurse an Asthma Treatment Plan.
- Asthma Treatment Plan needs to be renewed annually.
- → Yellow and Red Sections are the orders for medications that the school nurses will administer as needed.



Administration of Medication Form

- All Asthma medication must be supplied by the parent/guardian.
- DO NOT send medication in backpack.
- The medication must be in its original packaging with the original pharmacy label attached.
- The parent/guardian must sign an Administration of Medication In School form.

Perth Amboy Public Schools

178 Barracks Street, Perth Amboy, NJ 08861

Eva Kucaba Supervisor of Nursing and Health Related Services Phone: 732 376-6200, Ext: 30145 E-Mail: evakucaba@paps.net

ADMINISTRATION OF MEDICATION IN SCHOOL

Dear Parent/Guardian:

Physician's Stamp:

Administrative policy of the Perth Amboy Public Schools requires the school nurse to have written permission from you and the attending physician. Medication administered by the school nurse should be done only in exceptional circumstances wherein the child's health may be jeopardized without it.

exceptional circumstances wherein the child's health may be jeopardized without it. Eva Kucaba As the Parent/Guardian of I request that the below medication, as prescribed, be administered to my child: Please have your doctor fill in the information requested on the form below. This form must be returned to the school nurse with a supply of the medication in the original, labeled pharmacy container. Physician's Section: Diagnosis for which medication is given: Contraindications:

WHAT ARE ALLERGIES?

Allergies are an abnormal response of the immune system.

Any substance that causes an allergic reaction is called an allergen.

An allergy could be something you:

- Eat
- Inhale into your lungs
- Inject into your body
- Touch



COMMON ALLERGENS

- Pollen
- Dust mites
- Mold
- Pet dander
- Latex
- Cockroaches
- Insect stings
- Medicines
- Food (commonly eggs, milk, peanuts, tree nuts, fish, shellfish, wheat and soy)



Reactions

Mild reactions can cause:

coughing, sneezing, itchy eyes, a runny nose and a scratchy throat.

Severe reactions can cause:

rashes, hives, breathing trouble, asthma attacks and even death.

Food allergies can cause:

stomach discomfort, vomit and diarrhea.

Insect allergies can cause:

swelling, redness and pain.



Reactions

- First-time exposure to allergens may only produce a mild reaction.
- Repeated exposures may lead to more serious reactions.
 - Once a person is sensitized (has had a previous reaction), even a limited exposure to a small amount of allergen can trigger a severe reaction.



Most severe reactions occur within seconds or minutes of exposure to the allergen, although some may occur hours later.

Statistics

- Approximately 32 million people in the United States have food allergies.
- Food allergies are a growing food safety and public health concern that affect an estimated 8% of children in the United States.
- ☐ That's 1 in 13 children, or about 2 students per classroom.
- 1 in 10 adults are affected with food allergies.
- Each year in the U.S., 200,000 people require emergency medical care for allergic reactions to food.



Allergy Diagnosis/Treatment

- If you or someone you know has allergy symptoms, an allergist or immunologist can help with a diagnosis.
- All test results must be interpreted by your medical provider who will review the results with your medical history.
- There is no cure for allergies.
- With prevention and treatment allergies can be managed.
- Treatment will be recommended by your medical provider.



Who is at Risk?

- The risk for developing allergies is higher if there is a familial history of asthma, allergies or eczema.
- If the child has asthma.
- Exposure to environmental allergens.
- Allergies can develop at any age, commonly show up during childhood or early adulthood.

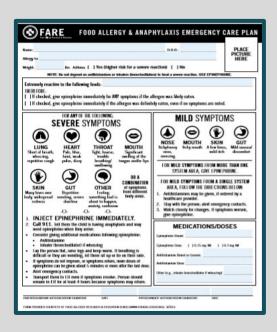


Allergies in School

The most common allergies in school are triggered by food and insects.

FOOD ALLERGY CARE PLAN:

- Must be filled out and signed by medical provider
- Must be signed by parent/guardian
- The medication ordered must be in its original packaging with the original pharmacy label attached
- Form needs to be renewed annually



Consent to Administer Medication in School:

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Public S	
178 Barracks Street, Per Eva Kucaba Supervisor of Nursing and Health Related Services	rth Amboy, NJ 08861 Phone: 732 376-6200, Ext: 30145 E-Mail: evakucaba@paps.net
ADMINISTRATION OF ME	DICATION IN SCHOOL
Dear Parent/Guardian:	
Administrative policy of the Perth Amboy Public Schools r from you and the attending physician. Medication admini exceptional circumstances wherein the child's health may	stered by the school nurse should be done only in
	Sincerely,
	Eva Kucaba
As the Parent/Guardian of	School/Room
Home Telephone	Work telephone
I request that the below medication, as prescribed, b	e administered to my child:
Signature	Date
Please have your doctor fill in the information requested of school nurse with a supply of the medication in the origin	
Physician's Section:	
Diagnosis for which medication is given:	
Medication:	Dosage:
Times: Contraindication	ns:
Side Effects:	5
Other information:	
Physician's Name:	Date:
Physician's Signature:	Tel. #
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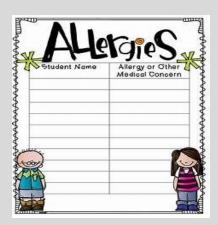
 Must be completed by parent/guardian and medical provider.

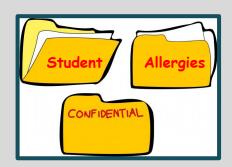
• The orders are renewed annually.

School Nurse Notifies Staff

The School Nurse will notify the classroom staff and food service department of your child's allergies to provide for their safety.

This information will be kept confidential and only shared with the necessary personnel.





Anaphylaxis

Anaphylaxis is a severe, potentially life-threatening allergic reaction that causes your immune system to release chemicals that can cause the body to go into shock.

Signs and symptoms of shock can occur within seconds or minutes of exposure to something you're allergic to:

- Swelling of the face, mouth and throat
- Short of breath, wheezing, repetitive cough
- Difficulty swallowing or speaking
- Abdominal pain, nausea or vomiting
- Pale, blue, dizzy, confused
- Loss of consciousness
- Widespread hives or hives on torso and neck



Anaphylaxis

Anaphylaxis requires an injection of epinephrine and a follow-up trip to an emergency room



- If you don't have epinephrine, you need to go to an emergency room immediately
- If anaphylaxis isn't treated right away, it can be **FATAL**
- When in doubt give the epinephrine and call 911!

EPiPen & Auvi-Q Autoinjectors: What is it & when is it used?

EPiPen and Auvi Q are epinephrine (adrenaline) administration devices.

They are used in emergencies to treat very serious allergic reactions.

- Automatic injection device
- Disposable
- Pre-filled with 1 dose of epinephrine









EPIPEN DOSAGES:

- \Box Junior 0.15 mg (green Label) for 33-66 lbs.
- Adult 0.3 mg (yellow label) for 66 lbs or greater



AUVI-Q DOSAGES:

- Infants & Toddlers 0.1 mg
 - (white and lavender label) for 16.5 33 lbs
- ☐ Children 0.15 mg
 - (blue label) for 33 66 lbs
- → Anyone 0.3 mg
 - (red label) for 66 lbs or greater







HOW TO USE AN EPIPEN



HOW TO USE AUVI-Q



Anaphylaxis

When a child comes in contact with something that he or she is allergic to reactions happen quickly.



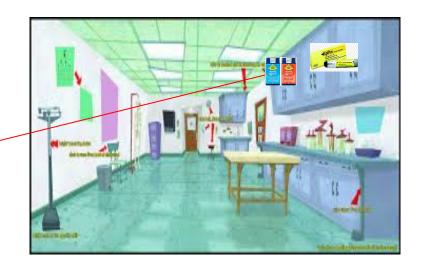
Epinephrine acts quickly to:

- Improve breathing
- Stimulate the heart
- Raise a dropping blood pressure
- Reverse hives
- Reduce swelling of the face, lips, and throat

Anaphylaxis can be FATAL and must be treated promptly with an injection of epinephrine.

Nurse's Office

Students EPiPen & Auvi-Q



Students EpiPen and Auvi-Q are labeled with the student's name and room number stored in unlocked cabinet in the nurse's office

References

<u>Asthma & Allergy Facts and Statistics</u>

CDC Healthy Schools

Healthy Children

Asthma & Allergy Foundation of America

Allergies Conditions & Treatments

Types of Allergies

Epi Pen Injections

Causes & Symptoms of

Anaphylaxis

Food Allergy Facts & Statistics

Food Allergies in Schools

Managing Asthma in School



Questions or Comments

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